Protection for Threatened and Impaired Watersheds, 1999

Proposed Rule Language

TEXT OF MODIFIED REGULATIONS
[from September 14, 1999]

Amend § 895 Abbreviations Applicable Throughout Chapter.

Note: The following five abbreviations may be added to this section in alphabetic order.

CDF	California Department of Forestry and Fire Protection
DFG	California Department of Fish and Game

Note: Alternative Language from the Interim Committee

HCP	Habitat Conservation Plan

Note: Alternative Language from NMFS

NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board

Note: Authority cited: Sections 4551, 4551.5 and 21082, Public Resources Code. Reference: Sections 4511, 4512, 4513, 4521.3, 4522, 4522.5, 4523-4525, 4525.3, 4525.5, 4525.7, 4526, 4526.5, 4527, 4527.5, 4528, 4551, 4551.5, 4552, 4582 and 21080.5, Public Resources Code.

Amend § 895.1. Definitions.

Note: The following seven definitions may be added to this section in alphabetic order.

"Bankfull stage" means the stage that occurs when discharge fills the entire channel cross section without significant inundation of the adjacent floodplain, and has a recurrence interval of 1.5 to 2.0 years.

Note: Alternative Language from the Interim Committee

"Beneficial Functions of Riparian Zone" means the specific role of the riparian zone to provide protection for water temperature control, streambed and flow modification by large woody debris, filtration of organic and inorganic material, upslope stability, bank and channel stabilization and vegetative structure diversity for fish and wildlife habitat.

"Channel zone" means that area that includes a watercourse's bankfull channel and floodplain, encompassing the area between the watercourse transition lines.

"Saturated soil conditions" means ~~1) the wetness of the soil within a yarding area such that soil strength is exceeded and displacement from timber operations will occur. It is evidenced by soil moisture conditions that result in: a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, or b) inadequate traction without blading wet soil or, c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake. Soils frozen to a depth~~

~~sufficient to support equipment weight are excluded. 2) soil moisture conditions on roads and landings, in excess of that which occurs from normal road watering or light rainfall that will result in the significant loss of surface material from the road and landings in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake~~ that site conditions are sufficiently wet that timber operations may displace soils in yarding or mechanical site preparation areas or road and landing surface materials in amounts sufficient to cause a turbidity increase in downstream Class I, II, III, or IV waters that is visible or would violate applicable water quality requirements. Soils or road and landing surfaces that are hard frozen are excluded from this definition. In yarding and site preparation areas, this condition is evidenced by spinning or churning of equipment wheels or tracks in excess of normal performance, the need to blade soils to provide adequate traction, or creation of ruts greater than would be normal following a light rainfall. On logging roads and landing surfaces, this condition is evidenced by pumping of road surface materials by traffic, or creation of ruts greater than would be created by traffic following normal road watering.

Note: Alternative Language from NMFS

"Saturated soil conditions" means ~~1) the wetness of the soil within a yarding area such that soil strength is exceeded and displacement from timber operations will occur. It is evidenced by soil moisture conditions that result in: a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, or b) inadequate traction without blading wet soil or, c) soil displacement in~~

~~amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake. Soils frozen to a depth sufficient to support equipment weight are excluded. 2) soil moisture conditions on roads and landings, in excess of that which occurs from normal road watering or light rainfall that will result in the significant loss of surface material from the road and landings in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake~~ that site conditions are sufficiently wet that timber operations (including, but not limited to, log hauling and layout construction) may displace soils in yarding or mechanical site preparation areas or road and landing surface materials in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters or downstream Class I, II, III, or IV waters that is visible or would violate applicable water quality requirements. Soils or road and landing surfaces that are hard frozen are excluded from this definition. In yarding and site preparation areas, this condition is evidenced by ~~spinning or churning of equipment wheels or tracks in excess of normal performance, the need to blade soils to provide adequate traction, or~~ creation of ruts greater than would be normal following a light rainfall. On logging roads and landing surfaces, this condition is evidenced by pumping of road surface materials by traffic, or creation of ruts greater than would be created by traffic following normal road watering.

"Stable operating surface" means that throughout the period of use, the operating surface of a logging road or landing does not either generate

sediment or become rutted or deformed to the extent that water can be channeled along the surface for more than 50 feet.

Note: Alternative Language from the Interim Committee

"Stable operating surface" means that throughout the period of use, the operating surface of a logging road or landing does not either generate sediment or become rutted or deformed to the extent that water can be channeled along the surface for more than 50 feet and discharged into Class I, II, III, or IV waters.

Note: Alternative Language from the Technical Team

"Stable operating surface" means that throughout the period of use, the operating surface of a logging road or landing does not either (1) generate sediment that can be discharged from the operating surface into Class I, II, III, or IV waters; or (2) become rutted or deformed to the extent that water can be channeled along the surface for more than 50 feet and discharged into Class I, II, III, or IV waters.

Note: Alternative Language from NMFS

"Stable operating surface" means that throughout the period of use, the operating surface of a logging road or landing does not either (1) generate sediment in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters or in downstream Class I, II, III, or IV waters that is visible or would violate applicable water quality requirements; or (2) become rutted or deformed to

the extent that water can be channeled along the surface for more than ~~50~~ 25 feet and be discharged into Class I, II, III, or IV waters.

"Watercourse or Lake Transition Line" means that line ~~closest to the watercourse or lake where riparian vegetation is permanently established~~ that is the outer boundary of a watercourse's floodplain as defined by the following:

(1) the upper limit of sand deposition; or

(2) evidence of recent channel migration and/or flood debris.

The first line of permanent woody vegetation must not be used to determine this transition line.

Note: Alternative Language from the Interim Committee

"Watercourse or Lake Transition Line" means that line ~~closest to the watercourse or lake where riparian vegetation is permanently established~~ that is the outer boundary of a watercourse's 20-year return interval flood event floodplain as defined by the following:

(1)the upper limit of sand deposition; or

(2)evidence of recent channel migration and/or flood debris.

The first line of permanent woody vegetation must not be used to determine this transition line.

Note: Alternative Language from the Technical Team

"Watercourse or Lake Transition Line"

(a) for a watercourse, it is defined as ~~means~~ that line ~~closest to the watercourse or lake where riparian vegetation is permanently established~~ that ~~is the outer boundary of a watercourse's 20-year return interval flood event floodplain as defined by the following:~~

~~(1)the upper limit of sand deposition; or~~

~~(2)evidence of recent channel migration and/or flood debris.~~

~~The first line of permanent woody vegetation must not be used to determine this transition line.~~ defining the outer boundary of a watercourse's flood prone area. This outer boundary of the flood prone area corresponds to an elevation equivalent to twice the maximum depth of the adjacent bankfull channel. The bankfull elevation shall be determined by qualified personnel using field indicators and shall be verified by drainage area/bankfull discharge relationships.

(b) for a lake, it is defined as that line closest to the lake where riparian vegetation is permanently established.

"Watersheds with threatened or impaired values" means any planning watershed:

(1) that contains or drains to a water body that is listed pursuant to Section 303(d) of the Federal Clean Water Act as having beneficial uses of water that are impaired by factors that may be affected by timber operations, including, but not limited to, sediment and temperature, except any portion of the planning watershed that contains or drains directly to a portion of

the water body that has been specifically excluded from the Section 303(d) list,

Note: Alternative Language from the Interim Committee

(1) that contains or drains to a water body that is listed pursuant to Section 303(d) of the Federal Clean Water Act as having beneficial uses ~~of water~~ that are impaired by sedimentation, siltation, nutrients or temperature factors that may be affected by timber operations, ~~including, but not limited to, sediment and temperature~~, except any ~~portion of the~~ planning watershed ~~that contains or drains directly to a portion of the water body that has been specifically excluded from the Section 303(d) list,~~ in which timber operations could not cause or contribute to the impairment or adversely affect the attainment of beneficial uses of the water body.

(2) that contains a water body that is the subject of a Total Maximum Daily Load that has been adopted to address factors that may be affected by timber operations, or

Note: Alternative Language from the Interim Committee

(2) that contains a water body that ~~is the subject of a~~ has a current Total Maximum Daily Load that has been ~~adopted~~ designed to address sedimentation, siltation, nutrients or temperature factors that may be affected by timber operations, or

(3) where populations of anadromous salmonids or populations of other aquatic or riparian-dependent species that are listed as threatened or

endangered under the State or Federal Endangered Species Acts and are currently supported or can feasibly be restored, including salmonids listed as candidate species.

Note: Alternative Language from the Interim Committee

(3) where populations of anadromous salmonids ~~or populations of other aquatic or riparian dependent species~~ that are listed as threatened~~,~~ ~~or~~ endangered, or candidate under the State or Federal Endangered Species Acts with their implementing regulations, ~~and~~ are currently ~~supported~~ present or can ~~feasibly~~ be restored~~, including salmonids listed as candidate species~~.

Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5, 4561.6, 4562, 4562.5, 4562.7 and 4591.1, Public Resources Code. Reference: Sections 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6, 4562, 4562.5, 4562.7, 4583.2, 4591.1, 21001(f), 21080.5, 21083.2 and 21084.1, Public Resources Code; CEQA Guidelines Appendix K (printed following Section 15387 of Title 14 Cal.Code of Regulations), and *Laupheimer v. State* (1988) 200 Cal.App.3d 440; 246 Cal.Rptr. 82.

Amend §§ 916, 936, and 956 Intent of Watercourse and Lake Protection.

The purpose of this article is to ~~insure~~ assure that ~~the protection of~~ the beneficial uses ~~that are derived from the physical form, water quality, and biological characteristics~~ of watercourses and lakes, aquatic and riparian species, and the beneficial functions of riparian zones are fully protected from site-specific and cumulative impacts associated with timber operations. It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing equal consideration for the

beneficial uses of water. Further, it is the intent of the Board to clarify and assign responsibility~~, to recognize~~ for recognition of potential and existing impacts of timber operations on~~ the beneficial uses of water,~~ watercourses and lakes, aquatic and riparian-dependant species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to ~~prevent water pollution related to timber harvesting~~ effectively achieve compliance with this article. All provisions of this article shall be applied in a manner that complies with the following:

Note: Alternative Language from the Interim Committee

The purpose of this article is to ~~insure~~ assure that ~~the protection of~~ the beneficial uses ~~that are derived from the physical form, water quality, and biological characteristics~~ of water~~courses~~ ~~and lakes~~, native aquatic and riparian species, and the beneficial functions of riparian zones are fully protected from potentially significant adverse site-specific and cumulative impacts associated with timber operations. It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing equal consideration for the beneficial uses of water. Further, it is the intent of the Board to clarify and assign responsibility~~, to recognize~~ for recognition of potential and existing impacts of timber operations on~~ the beneficial uses of water,~~ watercourses and lakes, native aquatic and riparian-dependant species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to ~~prevent water pollution related to timber harvesting~~ effectively achieve compliance with this article. All provisions of this article shall be applied in a manner, which complies with the following:

(a) During and following timber operations, the beneficial uses of water, aquatic and riparian-dependent species, and the functions of riparian zones, soils and vegetation, shall be maintained where they are in good condition, effectively protected where they are threatened, and insofar as feasible, effectively restored where they are impaired.

Note: Alternative Language from the Interim Committee

(a) During and following timber operations, the beneficial uses of water, native aquatic and riparian-dependent species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, effectively protected where they are threatened, and insofar as feasible, effectively restored where they are impaired.

(b) Protection of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan adopted or approved by the State Water Resources Control Board. At a minimum, the LTO shall not do either of the following during timber operations:

(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial riparian zone functions, or the quality and beneficial uses of water;

Note: Alternative Language from the Interim Committee

(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial ~~riparian zone~~ functions of riparian zones, or the quality and beneficial uses of water;

(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial riparian zone functions, or the quality and beneficial uses of water.

Note: Alternative Language from the Interim Committee

(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial ~~riparian zone~~ functions of riparian zones, or the quality and beneficial uses of water.

(c) Protecting and restoring aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be the primary management objective within any prescribed WLPZ, or within any planning watershed with threatened or impaired values.

Note: Alternative Language from the Interim Committee - Alternative 1

(c) Protecting and restoring native aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be the primary management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection, or within any planning watershed with threatened or impaired values.

Note: Alternative Language from the Interim Committee - Alternative 2

(c) Protecting and restoring native aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be the primary management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection ~~or within any planning watershed with threatened or impaired values~~.

Note: Alternative Language from the Interim Committee - Alternative 3

(c) Protecting and restoring native aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be given equal consideration as a ~~the primary~~ management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection ~~or within any planning watershed with threatened or impaired values~~.

Note: Alternative Language from the Technical Team - Alternative 1

(c) Protecting and restoring native aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be the primary management ~~objective~~ consideration within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection, or within any planning watershed with threatened or impaired values.

Note: Alternative Language from the Technical Team - Alternative 2

(c) Protecting and restoring native aquatic and riparian dependant species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be the primary management ~~objective~~ consideration within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection ~~or within any planning watershed with threatened or impaired values~~.

Note: Alternative Language from NMFS

(d) The measures set forth in this Section are meant to enforce the publics historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 4512, 4513, 4551.5, 4552, 4562.5, 4562.7, 21001(b), (f), 21002 and 21002.1, Public Resources Code; Sections 100, 1243, 1243.5, 13001, 13001(f), 13146 and 13147, Water Code; and 33 USC Section 1288(b)(2)(F).

Amend §§ 916.2, 936.2, and 956.2 Protection of the Beneficial Uses of Water and Riparian Functions.

(a) The measures used to protect ~~the beneficial uses of water for~~ each watercourse and lake in a logging area shall be determined by the presence and condition of the following values:

(1) The existing, potential, and restorable quality and beneficial uses of water as specified by the applicable water quality control plan and as further identified and refined during preparation and review of the required plan.

Note: Alternative Language from the Interim Committee

(1) The existing, potential, and restorable quality and beneficial uses of water as specified by the applicable water quality control plan and as further identified and refined during preparation and review of the ~~required~~ plan.

(2) The restorable uses of water for fisheries as identified by the ~~Department of Fish and Game~~ DFG or as further identified and refined during preparation and review of the required plan.

Note: Alternative Language from the Interim Committee

(2) The restorable uses of water for fisheries as identified by the ~~Department of Fish and Game~~ DFG or as further identified and refined during preparation and review of the ~~required~~ plan.

(3) Riparian habitat that provides for t~~T~~he biological needs of ~~the fish and wildlife~~ aquatic and riparian-dependant species ~~provided by the riparian habitat~~ as specified in 14 CCR 916.4(b) [936.4(b), 956.4(b)].

Note: Alternative Language from the Interim Committee

(3) Riparian habitat that provides for t~~T~~he biological needs of ~~the fish and wildlife~~ native aquatic and riparian-dependant species ~~provided by the riparian habitat~~ as specified in 14 CCR 916.4(b) [936.4(b), 956.4(b)].

(4) Sensitive ~~near stream~~ conditions near watercourses and lakes as specified in 14 CCR 916.4(a) [936.4(a), 956.4(a)].

These values shall be fully protected from potentially significant adverse impacts from any timber operation and restored to good condition, where needed, through a combination of the rules and plan-specific mitigation.

(b) The State's waters are grouped into four classes based on key beneficial uses. These classifications shall be used to determine the appropriate minimum protection measures to be applied ~~to the State's waters~~ during the conduct of timber operations. The basis for classification (characteristics and key beneficial uses) are set forth in 14 CCR 916.5 [936.5, 956.5], Table 1 and the range of minimum protective measures applicable to each class are contained in ~~Sections~~ 14 CCR 916.3 [936.3, 956.3], 916.4~~(c)~~ [936.4, 956.4], and 916.5 [936.5, 956.5]

(c) When the protective measures contained in 14 CCR 916.5 [936.5, 956.5] are not adequate to provide protection to beneficial uses, feasible protective measures shall be developed by the RPF or proposed by the Director

under the provisions of 14 CCR 916.6 [936.6, 956.6], Alternative Watercourse and Lake Protection, and incorporated in the THP when approved by the Director.

Note: Alternative Language from the Interim Committee

(c) When the protective measures contained in 14 CCR 916.5 [936.5, 956.5] are not adequate to provide protection to beneficial uses, feasible protective measures shall be developed by the RPF or proposed by the Director under the provisions of 14 CCR 916.6 [936.6, 956.6], Alternative Watercourse and Lake Protection, and incorporated in the ~~THP~~ plan when approved by the Director.

(d) If it would not be feasible to implement these minimum protective measures, then alternative practices may be used pursuant to 14 CCR 916.6 [936.6, 956.6].

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section 1288(b)(2)(F).

~~**§§ 916.9 [936.9, 956.9] Exclusion of Material from Streams and Lakes.**~~

Adopt §§ 916.9, 936.9, 956.9 Protection and Restoration in Watersheds with Threatened or Impaired Values.

In addition to all other district Forest Practice Rules, the following requirements shall apply in any planning watershed with threatened or impaired values:

(a) Every timber operation shall be planned and conducted to prevent any deleterious interference with natural recovery rates and process for the factors that primarily limit the condition of the values set forth in 14 CCR 916.2 [936.2, 956.2](a) (e.g., no net sediment load increase where sediment is a primary limiting factor; no net thermal load increase where water temperature is a primary limiting factor; no net loss of instream large woody debris or recruitment potential where lack of this value is a primary limiting factor; no substantial increase in peak flows or large flood frequency where peak flows or large flood frequency are primary limiting factors). To comply with this objective, every timber operation shall be planned and conducted to meet the following goals:

Note: Alternative Language from the Interim Committee

(a) Every timber operation shall be planned and conducted to prevent any deleterious interference with the natural recovery ~~rates~~ and the natural processes of the factors that primarily limit the condition of the values set forth in 14 CCR 916.2 [936.2, 956.2](a) (e.g., no net sediment load increase where sediment is a primary limiting factor; no net thermal load increase where water temperature is a primary limiting factor; no net loss of instream

large woody debris or recruitment potential where lack of this value is a primary limiting factor; no substantial increase in peak flows or large flood frequency where peak flows or large flood frequency are primary limiting factors). To comply with this objective, every timber operation shall be planned and conducted to meet the following goals where they affect a primary limiting factor:

Note: Alternative Language from the Technical Team

(a) Every timber operation shall be planned and conducted to prevent any deleterious interference with the natural recovery ~~rates and process for the factors~~ of the watershed conditions that primarily limit ~~the condition of~~ the values set forth in 14 CCR 916.2 [936.2, 956.2](a) (e.g., no net sediment load increase where sediment is a primary limiting factor; no net thermal load increase where water temperature is a primary limiting factor; no net loss of instream large woody debris or recruitment potential where lack of this value is a primary limiting factor; no substantial increase in peak flows or large flood frequency where peak flows or large flood frequency are primary limiting factors). To comply with this objective, every timber operation shall be planned and conducted to meet the following goals where they affect a primary limiting factor:

(1) Result in no net sediment load increase to a watercourse system or lake.

(2) Result in no decrease in the stability of a watercourse channel or of a watercourse or lake bank.

(3) Result in no blockage of any aquatic migratory routes for anadromous salmonids or listed species.

(4) Result in no stream flow reductions during critical low water periods.

(5) Protect, maintain, and restore trees (especially conifers), snags, or downed logs that currently, or may in the foreseeable future, provide large woody debris recruitment needed for instream habitat structure and fluvial geomorphic functions.

Alternative Language from the Interim Committee

(5) Protect, maintain, and restore trees (especially conifers), snags, or downed ~~logs~~ large woody debris that currently, or may in the foreseeable future, provide large woody debris recruitment needed for instream habitat structure and fluvial geomorphic functions.

(6) Protect, maintain, and restore the quality and quantity of vegetative canopy needed to: (i) provide shade to the watercourse or lake, (ii) minimize daily and seasonal temperature fluctuations, (iii) maintain daily and seasonal water temperatures within the preferred range for anadromous salmonids or listed species where they are present or could be restored, and (iv) provide hiding cover and a food base where needed.

(7) Result in no substantial increases in peak flows or large flood frequency.

(b) Adverse cumulative watershed effects on beneficial uses of water and/or the populations and habitat of anadromous salmonids or listed species

shall be deemed to exist, and the plan shall set forth measures to effectively reduce such effects.

(c) Any timber operation or silvicultural prescription within 200 feet of any Class I waters or within the standard or expanded width of any Class II WLPZ shall have protection, maintenance, or restoration of the beneficial uses of water or the populations and habitat of anadromous salmonids or listed aquatic or riparian-dependent species as its primary objectives; harvesting of wood products shall be secondary to those objectives.

Note: Alternative Language from the Interim Committee

(c) Any timber operation or silvicultural prescription within 200 feet of any Class I waterscourse or lake transition line or ~~within the standard or expanded width~~ 125 feet of any Class II ~~WLPZ~~ watercourse or lake transition line shall have protection, maintenance, or restoration of the beneficial uses of water or the populations and habitat of anadromous salmonids or listed aquatic or riparian-dependent species as its primary objectives; harvesting of wood products shall be secondary to those objectives.

Note: Alternative Language from the Technical Team

(c) Any timber operation or silvicultural prescription within 150 ~~200~~ feet of any Class I waterscourse or lake transition line or ~~within the standard or expanded width~~ 100 feet of any Class II ~~WLPZ~~ watercourse or lake transition line shall have protection, maintenance, or restoration of the beneficial uses of water or the populations and habitat of anadromous salmonids or listed aquatic or riparian-dependent species as its primary objectives; harvesting of wood products shall be secondary to those

objectives. Additionally, for evenaged regeneration methods and rehabilitation with the same effects as a clearcut that are adjacent to a WLPZ, a special operating zone shall retain understory and mid-canopy conifers and hardwoods. These trees shall be protected during falling, yarding and site preparation to the extent feasible. Trees that are retained within this zone that are knocked down during operations shall remain within the zone as LWD. The zone shall be 25 feet above Class I WLPZs with slopes 0-30% and above Class II WLPZs and 50 feet above Class I WLPZs with slopes > 30%.

(d) Nonstandard practices (i.e., waivers, exceptions, in-lieu practices, and alternative practices) shall comply with the goals set forth in subsection (a) above as well as with the other requirements set forth in the rules.

(e) The minimum WLPZ width for Class I waters shall be 150 feet from the watercourse or lake transition line.

(f) For Class I waters, any required plan involving a timber operation within the WLPZ shall contain the following information:

Note: Alternative Language from the Interim Committee

(f) For Class I waters, any ~~required~~ plan involving a timber operation within the WLPZ shall contain the following information:

(1) A clear and enforceable specification of how any disturbance or log or tree cutting and removal within the Class I WLPZ shall be carried out to conform with 14 CCR 916.2 [936.2, 956.2](a) and 916.9 [936.9, 956.9](a).

(2) A specific and enforceable long term monitoring program to determine the effectiveness of the prescribed practices as implemented during the timber operation, including the reporting of the monitoring results to CDF and review team agencies.

Note: Alternative Language from the Interim Committee

(2) The Director may require a post-harvest evaluation of the effectiveness of the mitigations and practices designed to protect watersheds with threatened or impaired values as a condition of plan approval. The Director shall require an evaluation at the request of the California Regional Water Quality Control Board or the California Department of Fish and Game if the necessity for the evaluation is supported by substantial evidence in the record. This evidence may include, but is not limited to, potential land failures, accelerated rate of road construction or harvesting within a watershed, concentration or intensity of harvesting activity near watercourses or springs. The design and implementation of the evaluation shall be done in consultation with the Director, the RWQCB or DFG, and THP submitter, and the sufficiency of the information requested by the Director shall be judged in light of reasonableness and practicality.

(3) A description of all existing permanent crossings of Class I waters by logging roads and clear specification regarding how these crossings are to be modified, used, and treated to minimize risks, giving special attention to allowing fish to pass both upstream and downstream during all life stages.

(4) Clear and enforceable specifications for construction and operation of any new crossing of Class I waters to prevent direct harm, habitat

degradation, water velocity increase, hindrance of fish passage, or other potential impairment of beneficial uses of water.

(g) Where an inner gorge is present above a Class I WLPZ and slopes are greater than 55%, a special management zone shall be established that requires the use of selection harvesting. This zone shall extend upslope to the first major break-in-slope, or 300 feet as measured from the watercourse or lake transition line, which ever is less. When evenaged management is proposed above a special management zone, but within an inner gorge and on slopes that range from 55% to 65%; the proposed operations shall be reviewed by a Certified Engineering Geologist (CEG) prior to plan approval. All operations on slopes exceeding 65% within an inner gorge shall be reviewed by a CEG prior to plan approval, regardless of whether they are proposed within a WLPZ or outside of a WLPZ.

Note: Alternative Language from the Interim Committee

(g) Where an inner gorge is present above a Class I WLPZ and slopes are greater than 55%, a special management zone shall be established ~~that requires the use of selection harvesting~~ where the use of evenaged regeneration methods is prohibited. This zone shall extend upslope to the first major break-in-slope to less than 55%, or 300 feet as measured from the watercourse or lake transition line, which ever is less. When evenaged management is proposed above a special management zone, but within an inner gorge and on slopes that range from 55% to 65%; the proposed operations shall be reviewed by a Certified Engineering Geologist (CEG) prior to plan approval. All operations on slopes exceeding 65% within an inner gorge shall

be reviewed by a CEG prior to plan approval, regardless of whether they are proposed within a WLPZ or outside of a WLPZ.

Note: Alternative Language from the Technical Team

(g) Where an inner gorge is present above a Class I WLPZ and slopes are greater than 55%, a special management zone shall be established ~~that requires the use of selection harvesting~~ where the use of evenaged regeneration methods is prohibited. This zone shall extend upslope to the first major break-in-slope to less than 55% for a distance of 100 feet or more, or 300 feet as measured from the watercourse or lake transition line, which ever is less. When evenaged management is proposed above a special management zone, but within an inner gorge and on slopes that range from 55% to 65%; the proposed operations shall be reviewed by a Certified Engineering Geologist (CEG) with expertise in slope stability prior to plan approval. All operations on slopes exceeding 65% within an inner gorge shall be reviewed by a CEG prior to plan approval, regardless of whether they are proposed within a WLPZ or outside of a WLPZ.

(h) All watercourse crossings will be constructed to accommodate the estimated 100-year flood flow, including debris and sediment loads.

Note: Alternative Language from the Interim Committee

(h) All permanent watercourse crossings will be constructed to accommodate the estimated 100-year flood flow~~, including debris and sediment loads~~.

Note: Alternative Language from the Interim Committee

(h) All permanent watercourse crossings ~~will be~~ that are constructed or reconstructed shall ~~to~~ accommodate the estimated 100-year flood flow, including debris and sediment loads.

(i) The following shall apply to all Class I watercourse crossings:

(1) Except for culverts, all new and replaced Class I crossings shall have a natural bottom.

(2) Any new permanent culverts installed within Class I watercourses shall allow upstream or downstream passage of fish or listed aquatic species during any life stage and for the natural movement of bedload to form a stable bed inside the culvert and shall meet the following specifications: (i) The culvert shall be at least equal to the average bankfull channel bed width at the elevation the culvert intersects the bed; (ii) the culvert shall be installed at a flat gradient; (iii) the downstream invert shall be countersunk a minimum of 20% of the culvert diameter or rise; (iv) upstream headcut potential shall be prevented; (v) the culvert shall accommodate the 100 year flood event, including debris and sediment loads.

Any alternative to these specifications requires an analysis and specifications by a Professional Engineer licensed in California demonstrating conformance with the intent of this section and subsection.

Alternative Language from the Interim Committee

(2) Any new permanent culverts installed within Class I watercourses shall allow upstream or downstream passage of fish or listed aquatic species during any life stage and for the natural movement of bedload to form a

stable bed inside the culvert and shall meet the following specifications: (i) The culvert diameter shall be at least equal to the average bankfull channel bed width at the elevation the culvert intersects the bed; (ii) the culvert shall be installed at ~~a flat~~ the natural watercourse gradient; (iii) the downstream invert shall be countersunk a minimum of 20% of the culvert diameter or rise; (iv) upstream headcut potential shall be prevented; (v) the culvert installation shall ~~accomodate~~ pass the 100 year flood event, ~~including debris and sediment loads~~ and shall include fill failure protection and a designed failure path.

Any alternative to these specifications requires an analysis and specifications ~~by a Professional Engineer licensed in California~~ demonstrating conformance with the intent of this section and subsection.

Note: Alternative Language from the Technical Team

(2) Any new permanent culverts installed within Class I watercourses shall allow upstream or downstream passage of fish or listed aquatic species during any life stage and for the natural movement of bedload to form a continuous ~~stable~~ bed through ~~inside~~ the culvert and shall meet the following specifications: (i) The culvert diameter shall be at least equal to the average ~~bankfull~~ channel bed width at bankfull stage at the elevation the culvert intersects the bed; (ii) the culvert shall be installed at a flat gradient; (iii) the downstream invert shall be countersunk a minimum of 20% of the culvert diameter or rise; (iv) upstream headcut potential shall be prevented; (v) the culvert installation shall ~~accomodate~~ pass the 100 year flood event, ~~including debris and sediment loads~~ and shall include fill failure protection and a designed failure path.

Any alternative to these specifications requires an analysis and specifications ~~by a Professional Engineer licensed in California~~ demonstrating conformance with the intent of this section and subsection.

(j)Harvesting is prohibited within the channel zone.

Note: Alternative Language from the Interim Committee

(j)Harvesting is prohibited within the channel zone except for the construction of crossings.

Note: Alternative Language from the Technical Team

(j)Harvesting is prohibited within the channel zone except for the construction or reconstruction of watercourse crossings.

(k) Within a WLPZ for Class I waters, at least 85 percent overstory canopy shall be retained within 75 feet of the watercourse or lake transition line, and at least 65 percent overstory canopy within the remainder of the WLPZ. The overstory canopy must be composed of at least 25% overstory conifer canopy post-harvest. Where these minimum percentages do not currently exist within the Class I WLPZ, no timber harvesting shall occur within the Class I WLPZ.

(l) The minimum WLPZ width for Class II waters shall be 100 feet from the watercourse or lake transition line..

(m) Within a WLPZ for Class II waters, at least 85 percent overstory canopy shall be retained within 30 feet of the watercourse or lake transition line, and at least 65 percent overstory canopy within the remainder of the

WLPZ. The overstory canopy must be composed of at least 25% overstory conifer canopy post-harvest. Where these minimum percentages do not currently exist within the Class II WLPZ, no timber harvesting shall occur within the Class II WLPZ.

(n) A 30 to 50 foot wide ELZ or EEZ is required for Class III waters. All hardwoods shall be retained within the ELZ or EEZ.

Note: Alternative Language from the Interim Committee

(n) The following shall apply to Class III waters:

(1) A ~~30 to~~ 50 foot wide ~~ELZ or EEZ~~ WLPZ is required for Class III waters on slopes less than 30%. Except for truck crossings identified in the plan, the WLPZ shall be an EEZ. All hardwoods shall be retained within the ~~ELZ or EEZ~~ WLPZ. Burning through the WLPZ shall not fully consume large organic debris within the WLPZ.

(2) A 100 foot wide WLPZ is required for Class III waters on slopes greater than or equal to 30%. Except for truck crossings identified in the plan, the WLPZ shall be an EEZ. At least 65% overstory canopy within the first 30 feet shall be retained. The overstory canopy must be composed of at least 25% overstory conifer post-harvest. Where these minimum percentages do not currently exist within the Class III WLPZ, no timber harvesting shall occur within the Class III WLPZ. All hardwoods shall be retained in the remainder of the WLPZ. No burning shall occur within the WLPZ.

(3) For all Class III waters, no ignition of fuels shall occur within the WLPZ or EEZ.

(o) Recruitment of large woody debris for aquatic habitat in Class I waters shall be ensured by retaining within the WLPZ at least ten conifers per 330 feet of stream channel length. The retained conifers shall be: (i) within 50 feet of the watercourse or lake transition line (ii) among the most likely to fall into the water, (iii) from the upper 20% of the dbh distribution of the preharvest stand in the WLPZ, (iv) clearly and permanently marked, and (v) retained in future harvests unless replaced by a tree that is of equal or greater size, and that is either more likely to contribute to recruitment, or is more rot resistant.

Note: Alternative Language from the Interim Committee

(o) Recruitment of large woody debris for aquatic habitat in Class I waters shall be ensured by retaining ~~within the WLPZ at least~~ the ten largest dbh conifers (live or dead) per 330 feet of stream channel length. The retained conifers shall be~~: (i)~~ selected from the area that lies within 50 feet of either side of the watercourse or lake transition line. ~~(ii) among the most likely to fall into the water, (iii) from the upper 20% of the dbh distribution of the preharvest stand in the WLPZ, (iv) clearly and permanently marked, and (v) retained in future harvests unless replaced by a tree that is of equal or greater size, and that is either more likely to contribute to recruitment, or is more rot resistant.~~

Note: Alternative Language from the Technical Team

(o) Recruitment of large woody debris for aquatic habitat in Class I waters shall be ensured by retaining ~~within the WLPZ at least~~ the ten largest dbh conifers (live or dead) per 330 feet of stream channel length. The

retained conifers shall be~~: (i)~~ selected from the area that lies within 50 feet of either side of the watercourse or lake transition line.~~ (ii) among the most likely to fall into the water, (iii) from the upper 20% of the dbh distribution of the preharvest stand in the WLPZ, (iv) clearly and permanently marked, and (v) retained in future harvests unless replaced by a tree that is of equal or greater size, and that is either more likely to contribute to recruitment, or is more rot resistant.~~ The RPF may substitute the next smaller diameter tree that is more conducive to LWD recruitment, shading, or bank stability if a review team agency concurs during a field review.

Note: Alternative Language from NMFS

(o) Recruitment of large woody debris for aquatic habitat in Class I waters shall be ensured by retaining ~~within the WLPZ at least~~ the ten largest dbh conifers (live or dead) per 330 feet of stream channel length. The retained conifers shall be~~: (i)~~ selected from the area that lies within 50 feet of either side of the watercourse or lake transition line. These retention standards shall apply to both sides of Class I watercourses.~~ (ii) among the most likely to fall into the water, (iii) from the upper 20% of the dbh distribution of the preharvest stand in the WLPZ, (iv) clearly and permanently marked, and (v) retained in future harvests unless replaced by a tree that is of equal or greater size, and that is either more likely to contribute to recruitment, or is more rot resistant.~~ The RPF may substitute the next smaller diameter tree that is more conducive to LWD recruitment, shading, or bank stability if a review team agency concurs during a field review.

(p) From October 15 to May 1,(i) no timber operations shall take place unless the approved plan incorporates a complete winter period operating plan pursuant to 14 CCR 914.7 [934.7, 965.7] (a), (ii) no skid trails shall be constructed, reconstructed, or used on slopes that are over 40 percent and within 200 feet of a Class I, II, or III watercourse, as measured from the watercourse or lake transition line, and (iii) operation of trucks and heavy equipment on roads and landings shall be limited to those with a permanent stable operating surface throughout the period of use.

Note: Alternative Language from the Interim Committee

(p) From October 15 to May 1,(i) no timber operations shall take place unless the approved plan incorporates a complete winter period operating plan pursuant to 14 CCR 914.7 [934.7, 965.7] (a), (ii) no skid trails shall be constructed, reconstructed, or used on slopes that are over 40 percent and within 200 feet of a Class I, II, or III watercourse, as measured from the watercourse or lake transition line, and (iii) operation of trucks and heavy equipment on roads and landings shall be limited to those with a ~~permanent~~ stable operating surface.

(q) Construction or reconstruction of logging roads, tractor roads, or landings shall not take place during the winter period. Use of logging roads, tractor roads, or landings shall not take place where saturated soil conditions exist, where a stable logging road or landing operating surface does not exist, or when visibly turbid water from the road, landing, or skid trail surface or inside ditch may reach a watercourse or lake. Grading to

obtain a dryer running surface more than one time before reincorporation of any resulting berms back into the road surface is prohibited.

Note: Alternative Language from the Interim Committee

(q) Construction or reconstruction of logging roads, tractor roads, or landings shall not take place during the winter period. Use of logging roads, tractor roads, or landings shall not take place at any location where saturated soil conditions exist, where a stable logging road or landing operating surface does not exist, or when visibly turbid water from the road, landing, or skid trail surface or inside ditch may reach a watercourse or lake. Grading to obtain a dryer running surface more than one time before reincorporation of any resulting berms back into the road surface is prohibited.

(r) All tractor roads shall have drainage and/or drainage collection and storage facilities installed prior to the start of any rain which causes overland flow across or along the disturbed surface or any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

Note: Alternative Language from the Interim Committee

(r) All tractor roads shall have drainage and/or drainage collection and storage facilities installed prior to either i) the start of any rain which causes overland flow across or along the disturbed surface, or ii) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

(s) Within the WLPZ, EEZ or ELZ, treatments to stabilize soils, minimize soil erosion, and prevent the discharge of sediment into waters in amounts deleterious to aquatic species or the quality and beneficial uses of water, or that threaten to violate applicable water quality requirements, shall be applied in accordance with the following standards:

Note: Alternative Language from the Interim Committee

(s) Within the WLPZ, and within any ELZ or EEZ designated for watercourse or lake protection, treatments to stabilize soils, minimize soil erosion, and prevent the discharge of sediment into waters in amounts deleterious to aquatic species or the quality and beneficial uses of water, or that threaten to violate applicable water quality requirements, shall be applied in accordance with the following standards:

(1) The following requirements shall apply to all such treatments.

i. They shall be described in the required plan.

Note: Alternative Language from the Interim Committee

i. They shall be described in the ~~required~~ plan.

ii. For areas disturbed from May 1 through October 15, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or by October 15th, whichever is earlier.

Alternative Language from the Interim Committee

ii. For areas disturbed from May 1 through October 15, treatment shall be completed prior to ~~any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or by October 15th, whichever is earlier~~ the start of any rain that causes overland flow across or along the disturbed surface.

iii. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.

(2) The traveled surface of logging roads shall be treated to prevent generation of sediment and concentration of runoff at anytime, and treated with rock or other suitable material to provide a stable operating surface during periods of use.

Note: Alternative Language from the Interim Committee

(2) The traveled surface of logging roads shall be treated to prevent ~~generation~~ waterborne transport of sediment and concentration of runoff at anytime, and treated with rock or other suitable material to provide a stable operating surface during periods of use.

(3) The treatment for other disturbed areas, including: (i) areas exceeding 100 contiguous square feet where timber operations have exposed bare soil, (ii) approaches to tractor road watercourse crossings between the drainage facilities closest to the crossing, (iii) road cut banks and fills,

and (iv) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, may include, but need not be limited to, mulching, rip-rapping, grass seeding, or chemical soil stabilizers. Where straw, mulch, or slash is used, the minimum coverage shall be 90%, and any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of timber operations.

(4) Where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from timber operations, the ground shall be treated by measures including, but not limited to, seeding, mulching, or replanting, in order to retain and improve its natural ability to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.

(t) As part of the required plan, the RPF shall identify active erosion sites linked to past management activities in the logging area, shall assess them to determine which sites pose significant risks to the beneficial uses of water and which can be feasibly remedied, and shall submit a remedial plan and time schedule to complete all remedial action for all sites that can be feasibly remediated.

Note: Alternative Language from the Interim Committee

(t) As part of the ~~required~~ plan, the RPF shall identify active erosion sites ~~linked to past management activities~~ in the logging area, ~~shall~~ assess them to determine which sites pose significant risks to the beneficial uses of water ~~and which can be feasibly remedied~~ , assess them to determine

whether feasible remedies exist, and ~~shall~~ submit a remedial plan and time schedule to complete all remedial action for all sites that pose significant risk to the beneficial uses of water, and that can be feasibly remediated.

(u) The erosion control maintenance period on permanent and seasonal roads and associated landings that are not abandoned in accordance with 14 CCR 923.8 shall be three years.

(v) The required plan shall fully describe: (i) the type and location of each measure needed to fully offset sediment or thermal loading or cumulative watershed effects from timber operations, and (ii) the person(s) responsible for the implementation of each measure, if other than the timber operator.

In proposing, reviewing, and approving such measures, preference shall be given to the following: (i) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (ii) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of-kind measures (i.e., improving shade where sediment is the problem) shall not be approved as meeting the requirements of this subsection.

Note: Alternative Language from the Interim Committee

(v) The ~~required~~ plan shall fully describe: (i) the type and location of each measure needed to fully offset sediment, thermal loading, and potential significant adverse ~~or~~ cumulative watershed effects from timber operations, and (ii) the person(s) responsible for the implementation of each measure, if other than the timber operator.

In proposing, reviewing, and approving such measures, preference shall be given to the following: (i) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (ii) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of-kind measures (i.e., improving shade where sediment is the problem) shall not be approved as meeting the requirements of this subsection.

Note: Alternative Language from the Technical Team

(v) The ~~required~~ plan shall fully describe: (i) the type and location of each measure needed to fully offset sediment loading, thermal loading, and potential significant adverse ~~or~~ ~~cumulative~~ watershed effects from the proposed timber operations, and (ii) the person(s) responsible for the implementation of each measure, if other than the timber operator.

In proposing, reviewing, and approving such measures, preference shall be given to the following: (i) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (ii) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of-kind measures (i.e., improving shade where sediment is the problem) shall not be approved as meeting the requirements of this subsection.

(w) No salvage logging is allowed in a WLPZ without: (i) written concurrence from DFG or an approved HCP with NMFS and (ii) an SYP or approved plan that contains a section that sets forth objectives, goals, and measurable results for streamside salvage operations.

Note: Alternative Language from the Interim Committee

(w) No salvage logging is allowed in a WLPZ without: (i) written concurrence from DFG or an approved HCP ~~with NMFS~~ and (ii) an SYP or approved plan that contains a section that sets forth objectives, goals, and measurable results for streamside salvage operations.

(x) Where these measures would not achieve the goals set forth in subsection (a), other measures that would effectively achieve such conformance may be approved in accordance with 14 CCR, 916.6 [936.6, 956.6].

(y) Site preparation activities that result in soil disturbance within or cause sediment movement into the channel of watercourses shall not be conducted. Prior to any burning, burning prescriptions shall be designed to prevent loss of large woody debris in watercourses, and vegetation and duff within a WLPZ, ELZ or EEZ. When burning prescriptions are proposed, the measures or burning restrictions which are intended to accomplish this goal shall be stated in the required plan and the burning permit. This information shall be provided in addition to the information required under 14 CCR 915.4 [935.4, 954.4].

Note: Alternative Language from the Interim Committee

(y) Site preparation activities that result in soil disturbance within or cause ~~sediment~~ soil movement into the channel of watercourses shall not be conducted. Prior to any burning, burning prescriptions shall be designed to ~~prevent~~ minimize loss of large woody debris in watercourses, and vegetation and duff within a WLPZ, ELZ or EEZ. When burning prescriptions are proposed, the measures or burning restrictions which are intended to accomplish this

goal shall be stated in the ~~required~~ plan and the burning permit. This information shall be provided in addition to the information required under 14 CCR 915.4 [935.4, 954.4].

Note: Alternative Language from the Technical Team

(y) Site preparation activities that result in soil disturbance within or cause ~~sediment~~ soil movement into the channel of watercourses shall not be conducted. Prior to any burning, burning prescriptions shall be designed to prevent loss of large woody debris in watercourses, and vegetation and duff within a WLPZ, ELZ or EEZ. When burning prescriptions are proposed, the measures or burning restrictions which are intended to accomplish this goal shall be stated in the ~~required~~ plan and the burning permit. This information shall be provided in addition to the information required under 14 CCR 915.4 [935.4, 954.4].

(z) Water drafting for timber operations shall conform with the following standards:

Note: Alternative Language from the Interim Committee

(z) Water drafting for timber operations from within a channel zone of a natural watercourse or from a lake shall conform with the following standards:

(1) Drafting is prohibited if surface flow: (i) is less than two cubic feet per second or (ii) would be reduced by more than 20% below the drafting or diversion point.

Note: Alternative Language from the Interim Committee

(1) Drafting ~~is prohibited if surface flow: (i) is less than two cubic feet per second or (ii) would be reduced by more than 20% below the drafting or diversion point.~~rate shall not exceed 10% of the streamflow and drafting quantity shall not exceed 10% of pool volume at the drafting or diversion point.

(2) Water holes shall not be constructed in watercourses or lakes.

(3) Intakes shall be screened in Class I and Class II waters.

Note: Alternative Language from the Interim Committee

(3) Intakes shall be screened in Class I and Class II waters. Screens shall be designed to prevent the entrainment or impingement of all life stages of fish or amphibians. Screen specifications shall be included in the plan.

(4) Approaches to drafting locations within a WLPZ shall be surfaced with rock or other suitable material to avoid generation of sediment.

(aa) No timber operations are allowed in the WLPZ, EEZ, or ELZ under emergency notices or exemption notices.

Note: Alternative Language from the Interim Committee

(aa) No timber operations except for hauling on existing roads and operations conducted for public safety are allowed in the WLPZ, EEZ, or ELZ under emergency notices or exemption notices.

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section 1288(b)(2)(F).

Adopt §§ 923.9 [943.9, 963.9] Road and Landings in Watersheds with Threatened or Impaired Values.

In addition to all other district Forest Practice Rules, the following requirements shall apply in any planning watershed with threatened or impaired values:

(a) Where road construction or reconstruction is proposed, the required plan shall state the locations of and specifications for road or landing abandonment or other mitigation measures to achieve no net increase in road density within the ownership within the watershed.

Note: Alternative Language from the Interim Committee

(a) Where road construction or reconstruction is proposed, the ~~required~~ plan shall state the locations of and specifications for road or landing abandonment or other mitigation measures to ~~achieve no net increase in road density within the ownership~~ minimize long-term site occupancy within the watershed.

(b) New and reconstructed logging roads shall be no wider than 14 feet for tractor yarding areas and 16 feet where cable yarders are employed. They

shall be outsloped and drained with water breaks. Where the road grade is inclined at 7 percent or less, rolling dips shall be used.

Note: Alternative Language from the Interim Committee

(b) New and reconstructed logging roads shall be no wider than ~~14 feet for tractor yarding areas and 16 feet where cable yarders are employed.~~ a single-lane compatible with the largest type of equipment specified for use within the plan, with adequate turnouts provided as required for safety. The maximum width of these roads shall be specified in the plan. ~~They~~ These roads shall be outsloped where feasible and drained with water breaks in conformance with other applicable Forest Practice Rules. Where the road grade is inclined at 7 percent or less, rolling dips shall be used.

(c) The following shall apply on slopes greater than 50%:

(1) Specific provisions of construction shall be identified and described for new roads.

(2) Where cutbank stability is not an issue, roads may be constructed as a full-benched cut (no fill). Spoils shall be disposed of in stable areas with less than 30 percent slope and outside of any WLPZ, EEZ, or ELZ.

(3) Alternatively, roads may be built with balanced cuts and fills if properly engineered with fills reinforcement or retainment, or fills may be removed with the slopes recontoured prior to the winter period.

(d) In addition to the provisions listed under 14 CCR 923.1(e) [943.1(e), 963.1(e)], all logging roads with a grade of 20% or greater that extends 500 continuous feet or more shall be surfaced with rock.

(e) Where situations exist that elevate risks to the factors set forth in 14 CCR 916.2(b), [936.2(b), 956.2(b)] (e.g., road networks are remote, the landscape is unstable, water conveyance features historically have a high failure rate, culvert fills are large) drainage structures and erosion control features shall be oversized, self-maintaining, or reinforced, or they shall be removed before the completion of the timber operation. The method of analysis used to design crossing protection shall be included in the required plan.

Note: Alternative Language from the Interim Committee

(e) Where situations exist that elevate risks to the factors set forth in 14 CCR 916.2(b), [936.2(b), 956.2(b)] (e.g., road networks are remote, the landscape is unstable, water conveyance features historically have a high failure rate, culvert fills are large) drainage structures and erosion control features shall be oversized, self-maintaining, or reinforced, or they shall be removed before the completion of the timber operation. The method of analysis used to design crossing protection shall be included in the ~~required~~ plan.

Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551, 4551.5, 4562.5, 4562.7, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section 1288(b); *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1976) 59 Cal.App. 3d 959, 131 Cal.Rptr. 172.

NOTE: The Board has illustrated changes to the originally noticed text in the following manner:

- language originally proposed is UNDERLINED
- deletions to existing language is shown with ~~STRIKETHROUGH~~
- deletions from the language originally proposed is shown with ~~UNDERLINE AND STRIKETHROUGH~~
- additions to the originally proposed language is DOUBLE-UNDERLINED
- all other text is existing rule language.
- all changes to the proposed language have been HIGHLIGHTED

doh: 9/17/99
File: 15 Day Notice Rule Text